

CLAIMS:

1. A method of continuously forming conduit comprising:
continuously applying at least one thin film ribbon, each having “leading” and “trailing” lateral edges, spirally around a former rotating and advancing said conduit, with the leading edge of each turn of ribbon overlapping the trailing edge of a previous turn of ribbon on the former and the trailing edge of each turn under lapping the leading edge of a succeeding turn, while,
in advance of said overlapping of said turns, applying a bead of molten plastic along the exposed trailing edge of the most recently applied turn on said former, such that a said bead is interposed between said trailing edges and said overlapping leading edges.
2. A method of continuously forming conduit as claimed in claim 1, wherein said thin film ribbon is sufficiently supple, at least laterally, to conform along its overlapping portion to the contour of said bead, so that the overlapping ribbon may meet or substantially meet the under lapping ribbon at the trailing edge of said bead.
3. A method of continuously forming conduit as claimed in claim 1, wherein said ribbon is a breathable plastic material.
4. A method of continuously forming conduit as claimed in 3, wherein said ribbon is a laminate where a layer of breathable plastic material is laminated to a reinforcing layer which also allows the passage of water vapour.
5. A method of continuously forming conduit as claimed in claim 1, wherein said thin film ribbon has a thickness of less than 50 microns.
6. A method of continuously forming conduit as claimed in claim 1, wherein said method further comprises the steps of,
applying one or more heating wires to the exposed trailing edge of the ribbon prior to applying the bead, such that the bead encapsulates the said one or more heating wires

onto the said trailing edge.

7. A method of continuously forming conduit as claimed in claim 1, where the former includes a plurality of rotating rods spaced about an axis and acting to support and advance the conduit during forming, further comprising:

first applying a sacrificial layer of thin plastic around said former, before said conduit is formed on said former over top of said sacrificial layer, and

subsequent to forming said conduit, removing said sacrificial layer from inside said thin walled conduit after cooling.

8. A method of continuously forming conduit as claimed in claim 7, wherein said sacrificial layer is a thin ribbon having “leading” and “trailing” lateral edges, and said sacrificial layer is spirally wound around said former in a continuous fashion, with the leading edge of each turn of said sacrificial layer overlapping the trailing edge of a previous turn of said sacrificial layer on the former and the trailing edge of each turn under lapping the leading edge of a succeeding turn.

9. A method of continuously forming conduit as claimed in claim 7, wherein said sacrificial layer is of a material having a different base polymer than that of said conduit, such that no substantial adhesion occurs when adjacent layers of said sacrificial layer and said conduit are heated.

10. A method for continuously manufacturing conduit comprising:

applying a sacrificial layer of thin plastic around a former, said former rotating and advancing said conduit,

forming a conduit on said former overtop said sacrificial layer, and

removing said sacrificial layer from inside said conduit after cooling.

11. A method for manufacturing conduit as claimed in claim 10, wherein said

sacrificial layer is a thin ribbon having "leading" and "trailing" lateral edges, and said ribbon is spirally wound around said former in a continuous fashion, with the leading edge of each turn of ribbon overlapping the trailing edge of a previous turn of ribbon on the former and the trailing edge of each turn under lapping the leading edge of a succeeding turn.

12. A method for manufacturing a conduit as claim 10, wherein said sacrificial layer is of a material having a different base polymer than that of said conduit, such that no substantial adhesion occurs when adjacent layers of said sacrificial layer and said conduit are heated.

13. A method of continuously forming conduit as claimed in claim 10, wherein said conduit has a wall thickness of less than 400 microns.

14. A conduit formed by a method according to any one of claims 1 to 9.

15. A conduit formed by a method according to any one of claims 10 to 13.

16. A conduit comprising:

at least one thin plastic ribbon having a leading and a trailing lateral edge, said ribbon arranged helically with its face substantially parallel with the helix axis, and, apart from at its ends, the leading edge of each turn of ribbon overlapping the trailing edge of a previous turn, and the trailing edge of each turn of ribbon under lapping the leading edge of a succeeding turn,

a plastic reinforcing bead interposed between each overlapping leading and trailing edge.

17. A conduit as claimed in claim 16, wherein said ribbon is of a breathable plastic material.

18. A conduit as claimed in claim 16, wherein said plastic reinforcing bead includes one or more heating wires encapsulated in said bead.

19. An apparatus for continuously forming conduit comprising:

a former for receiving at least one thin plastic ribbon, said former drawing said ribbon around and advancing said ribbon along to procure a helical arrangement of said ribbon, the pitch of said helical arrangement being somewhat less than the width of said ribbon,

means for delivering a ribbon to said former at a first position on said former, and

means for continuously delivering a molten bead to said former at a second position less than one turn pitch from the first position of delivery of said ribbon, said second position corresponding to an expected position of the trailing edge of a ribbon delivered by said means for delivering a ribbon.

20. An apparatus for continuously forming conduit comprising:

a former for receiving plastic ribbon, said former drawing said ribbon around and advancing said ribbon along, to procure an overlapping helical arrangement of said ribbon, the pitch of said helical arrangement being somewhat less than the width of said ribbon,

a first means for delivering a first ribbon to said former, at a first location

a second means for delivering a second ribbon to said former, at a location subsequent to said first ribbon,

a means for continuously delivering a molten bead to said former at a position less than one turn pitch from the position of delivery of said second ribbon said position corresponding to an expected position of the trailing edge of said second ribbon.

21. An apparatus for continuously forming conduit as claimed in claim 20, wherein there is no means for applying any material to the outside of said first ribbon before it is overlayed by said second ribbon.

22. A method for removing a releasable inner layer from within a conduit comprising:

placing said conduit, including said inner layer around an elongate shaft having a longitudinal slot,

forming an adequate seal toward a first end of said shaft, effective for the conduit to at least substantially seal said slot, from the surroundings, apart from at the other end of said shaft,

applying suction to said slot,

initiating release of said inner layer from said conduit,

removing said conduit from said shaft after said inner layer is released from said conduit.

23. A method for removing a releasable inner layer from within a conduit as claimed in claim 22, wherein said step of initiating includes urging said inner layer at a position toward said other end of said shaft, into said slot,
said urging forming an adequate seal between said shaft and said layer.

24. An apparatus for assisting removal of a releasable inner layer within a conduit comprising:

an elongate shaft having a longitudinal slot,

a effective sealing means for making an adequate seal between said inner layer and said shaft, toward a first end of said shaft,

a means to suck gases from said slot, and release said inner layer from said conduit.